



## WATER MANAGEMENT DIVISION MONTHLY REPORT

### Information Exchange Bulletin

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### RESERVOIR OPERATION AND SYSTEM STATUS FOR FEBRUARY 1999

**HIGHLIGHTS** –The stage at Cairo varied within a range of 25.4-49.5 feet, ending the month near 25.4 feet. The Ohio River crested at Cairo on the 4<sup>th</sup> at 49.47 feet. Normal stage for February is 31 feet.

**WEATHER** – The weather during February was warm and dry over much of the basin. Temperatures averaged 4-8 degrees above the expected average. Precipitation was below normal for most of the basin with western Tennessee receiving less than half the expected amount. Illinois, Indiana, and western Ohio did receive above normal precipitation.

The following table summarizes temperature and precipitation for February:

#### TEMPERATURE AND PRECIPITATION – FEBRUARY 1999

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	34.0	+5.3	2.43	+0.04
Charleston, WV	39.4	+3.9	2.67	-0.37
Columbus, OH	37.0	+7.4	2.76	+0.52
Cincinnati, OH	37.8	+6.0	3.66	+0.97
Louisville, KY	42.6	+6.9	2.20	-1.10
Indianapolis, IN	37.5	+7.9	3.57	+1.11
Evansville, IN	40.9	+6.5	1.94	-1.18
Nashville, TN	45.8	+5.4	2.32	-1.49

**STREAMFLOW** -- Ohio River monthly average flows for February ranged from a low of 81 percent of normal at Cincinnati, OH to a high of 114 percent of normal at Paducah, KY. Daily flows ranged from a low of 28 percent of normal at Evansville, IN to a high of 195 percent of normal at Paducah, KY.

The following table presents the flow data summary for February at the Ohio River Index Stations:

**FLOW DATA – FEBRUARY 1999**

STATION	AVERAGE MONTHLY FLOW	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
	CUBIC FEET/SECOND		HIGH	LOW
Pittsburgh, PA	46,314	94	174	37
Huntington, WV	108,500	84	135	39
Cincinnati, OH	134,860	81	122	36
Louisville, KY	166,000	86	125	38
Evansville, IN	214,320	92	168	28
Paducah, KY	538,860	114	195	41

**RESERVOIRS** -- February started with 10.7% utilization of the total system flood control storage, its highest value for the period, and ended the month at 3.4%. System-wide augmentation storage decreased from 89.3% at the beginning of the month to 82.2% by the end of the month. Significant flood storage utilization in excess of 25% occurred at twelve reservoir projects during February:

Berlin	47%	Milton	29%
Atwood	37%	Bolivar	31%
Clendenning	27%	Leesville	37%
Tappan	29%	Salamonie	36%
Mississinewa	40%	Hardin	52%
Cagles Mill	47%	Monroe	38%

The following table depicts storage change by tributary reservoir subsystem for February:

<b>CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM</b>	<b>(ACRE-FEET)</b>
Allegheny-Monongahela-Beaver	-194,200
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	-181,400
Twelvepole-Big Sandy-Little Sandy-Scioto	+4,500
Little Miami-Licking-Mill Creek-Great Miami	-67,400
Kentucky-Salt-Green-Wabash	-546,100
Cumberland	-1,564,400
<b>TOTAL</b>	<b>2,549,000</b>

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